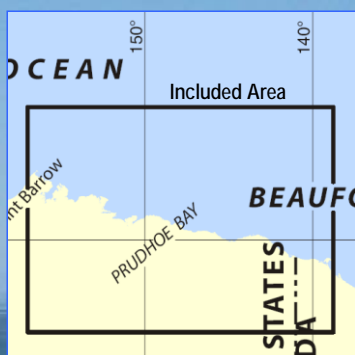


BookletChart™

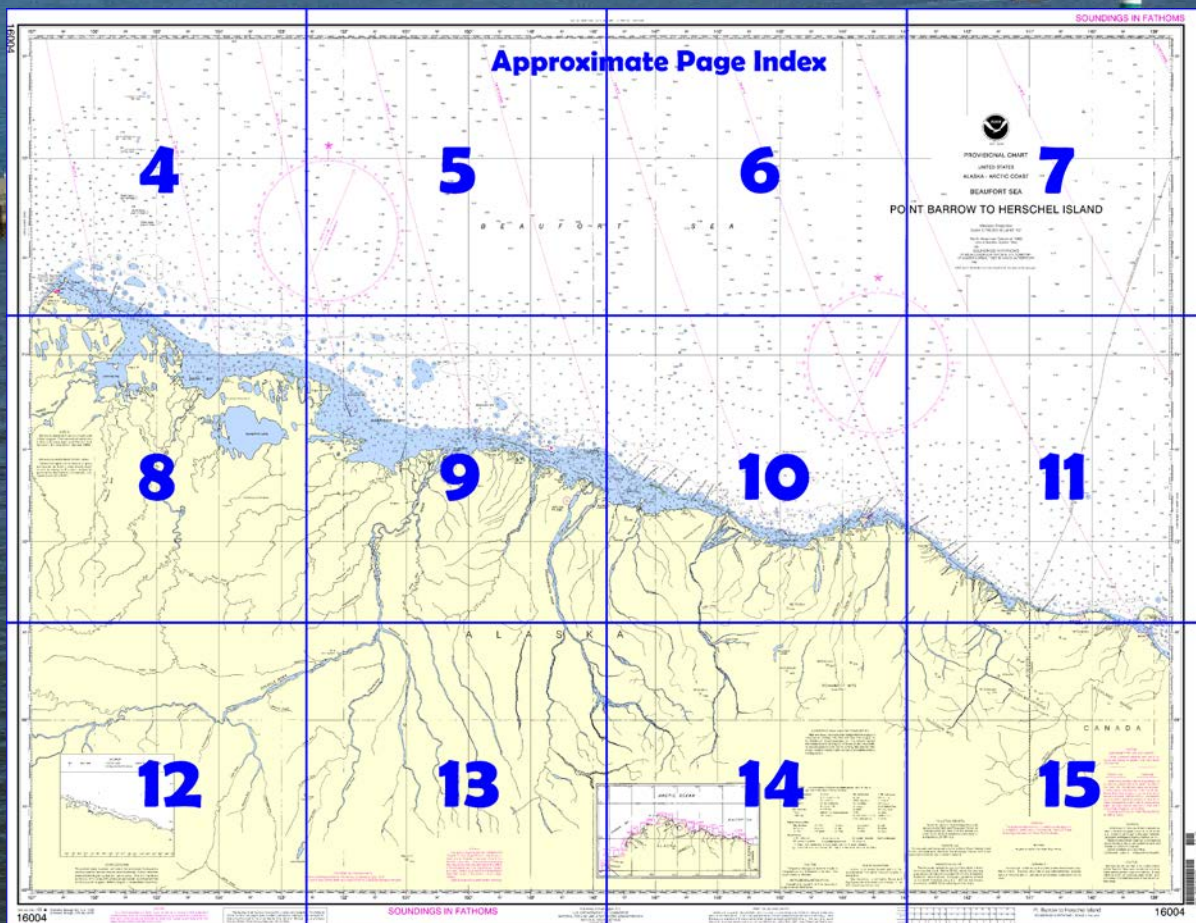
Point Barrow to Herschel Island NOAA Chart 16004



A reduced-scale NOAA nautical chart for small boaters
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888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=16004>.



(Selected Excerpts from Coast Pilot)

Point Barrow (71°23'N., 156°28'W.), the northernmost point of land in the United States, is the seaward end of a gravelly sandspit that extends 3 miles NE from the rest of the mainland. The point is also the NE corner of Chukchi Sea and the SW corner of Beaufort Sea. The N limit of **Beaufort Sea** is a line from Point Barrow to Lands End, Prince Patrick Island, Canada. **Currents.**—The current NW of the point was observed to flow constantly in a NE

direction at an estimated strength of 3 to 4 knots; along the NE side of the point the current flowed in a NW direction at an estimated strength of 1 knot. Judging from the movement of the icebergs, there seemed to

be an eddy centered several miles NE of the point.

Caution.—Mariners are advised that in the shallow waters of the Beaufort Sea, water levels are strongly influenced by meteorological conditions. Strong offshore winds can produce water depths up to 2½ feet less than those shown on the charts.

A number of oil drilling platforms are in the Beaufort Sea between 151°W and 147°W. These platforms are generally manmade gravel islands about 500 feet in diameter. In 1992, a majority of the platforms were reported abandoned and the lights marking the structures were removed. A few are reported completely awash. The status of all known platforms is periodically published in the 17th Coast Guard District Local Notice to Mariners.

Weather, Barrow Vicinity.—Barrow is the location of the most northern Weather Service Office (WSO) operated by the National Weather Service. Although this station generally records one of the lowest mean temperatures for the winter months, the surrounding topography prevents the establishment of the lowest minimum for the state. With the Arctic Ocean to the N, E, and W, and level tundra stretching 200 miles (370 km) to the S, there are no natural wind barriers to assist in stilling the wind, permitting the lowering of temperatures by radiation, and no downslope drainage areas to aid the flow of cold air to lower levels. Consequently, temperature inversions in the lower levels of the atmosphere are not as marked as those observed at stations in the central interior.

Temperatures at the Barrow WSO remain below the freezing point through most of the year, with the daily maximum reaching higher than 32°F (0°C) on an average of only 109 days a year. The mean daily maximum for the station is only 15°F (-9.4°C) while the mean daily minimum is 4°F (-15.6°C). The mean annual is 10°F (-12.2°C). Daily minimums drop below the freezing point (0°C) 324 days of the year, and freezing temperatures have been observed in every month of the year. February is generally the coldest month, with a normal mean of -17°F (-27.2°C), and the lowest temperature at the station on record -56°F (-48.8°C) reached in February 1924. March temperatures are but little higher than those observed in the winter months. In April, temperatures begin a general upward trend, with May becoming the definite transitional period from winter to the summer season. During the latter month an average of five daily maximum temperatures climb above the freezing point. July is the warmest month of the year, with a normal mean of 40°F (4.4°C). The record high for the station is 79°F (26.1°C) recorded in July 1993. During late July or early August, the Arctic Ocean is generally ice-free for the first time in summer. The end of the short summer is reached in September. By November about half of the daily mean temperatures are zero (-17.8°C) or below.

Precipitation at Barrow is extremely light with a mean annual value of 4.57 inches (116 mm). The wettest months are July and August when nearly a half of the annual precipitation total may fall. Despite such limited amounts of precipitation, precipitation is recorded an average 252 days per year. Snowfall averages about 29 inches (737 mm) each year, occurs an average of 211 days each year and has been recorded during every month.

Ice.—Average breakup at Barrow is in late July and average freezeup is in early October. Navigation is difficult from mid-October to late July and usually is suspended from early December to early July. The ice barrier that extends from 0.5 mile off Barrow to 1.5 miles NW of Point Barrow can be dangerous to navigation.

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Juneau Commander
17th CG District (907) 463-2000
Juneau, Alaska

Table of Selected Chart Notes

Corrected through NM Feb. 11/06
Corrected through LNM Jan. 24/06

HEIGHTS

Heights in feet above Mean High Water.

MINERAL DEVELOPMENT STRUCTURES

Obstruction lights and sound (fog) signals are required for fixed mineral development structures shown on this chart, subject to approval by the District Commander, U.S. Coast Guard (33 CFR 67).

NOTE B

Numerous obstructions are reported to exist in Elson Lagoon. The heaviest concentrations of obstructions are reported in the vicinity of the cove north of Brand Point. See chart 16082.

CAUTION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

AIDS TO NAVIGATION

Consult U.S. Coast Guard Light List for supplemental information concerning aids to navigation.

See Canadian List of Lights, Buoys and fog Signals for information not included in the U.S. Coast Guard Light List.

NOTE A

Navigation regulations are published in Chapter 2, U.S. Coast Pilot 9. Additions or revisions to Chapter 2 are published in the Notice to Mariners. Information concerning the regulations may be obtained at the Office of the Commander, 17th Coast Guard District in Juneau, Alaska, or at the Office of the District Engineer, Corps of Engineers in Anchorage, Alaska.

Refer to charted regulation section numbers.

POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

CAUTION

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:



Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

Covered wells may be marked by lighted or unlighted buoys.

CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117.

Radio direction-finder bearings to commercial broadcasting stations are subject to error and should be used with caution.

Station positions are shown thus:

○ (Accurate location) ◦ (Approximate location)

CAUTION

Mariners are advised that in the shallow waters of the Beaufort Sea, water levels are strongly influenced by meteorological conditions. Strong offshore winds can produce water depths up to 0.8 meters (2.6 feet) less than those shown on this chart.

WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

SUBSISTENCE WHALING IN THE BEAUFORT SEA

Mariners should be aware that Alaskan Natives engage in subsistence whaling in the Beaufort Sea from August 15 to October 31. Vessel operators are requested to contact the Alaska Eskimo Whaling Commission at (907) 852-2392, or aewcdir@barrow.com prior to entering this area for information about the location and avoidance of traditional Native hunting parties.

HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83), which for charting purposes is considered equivalent to the World Geodetic System of 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 do not require conversion to NAD 83 for plotting on this chart.

Mercator Projection
Scale 1:700,000 at Lat 69° 00'

North American Datum of 1983
(World Geodetic System 1984)

1560

SOUNDINGS IN FATHOMS
AT MEAN LOWER LOW WATER IN U.S. TERRITORY
AT LOWEST NORMAL TIDES IN CANADIAN TERRITORY

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Geological Survey, U.S. Coast Guard and Canadian Hydrographic Service.

SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

COLREGS, 80-1705 (see note A)

International Regulations for Preventing Collisions at Sea, 1972.
The entire area of this chart falls seaward of the COLREGS Demarcation Line.

ABBREVIATIONS

(For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

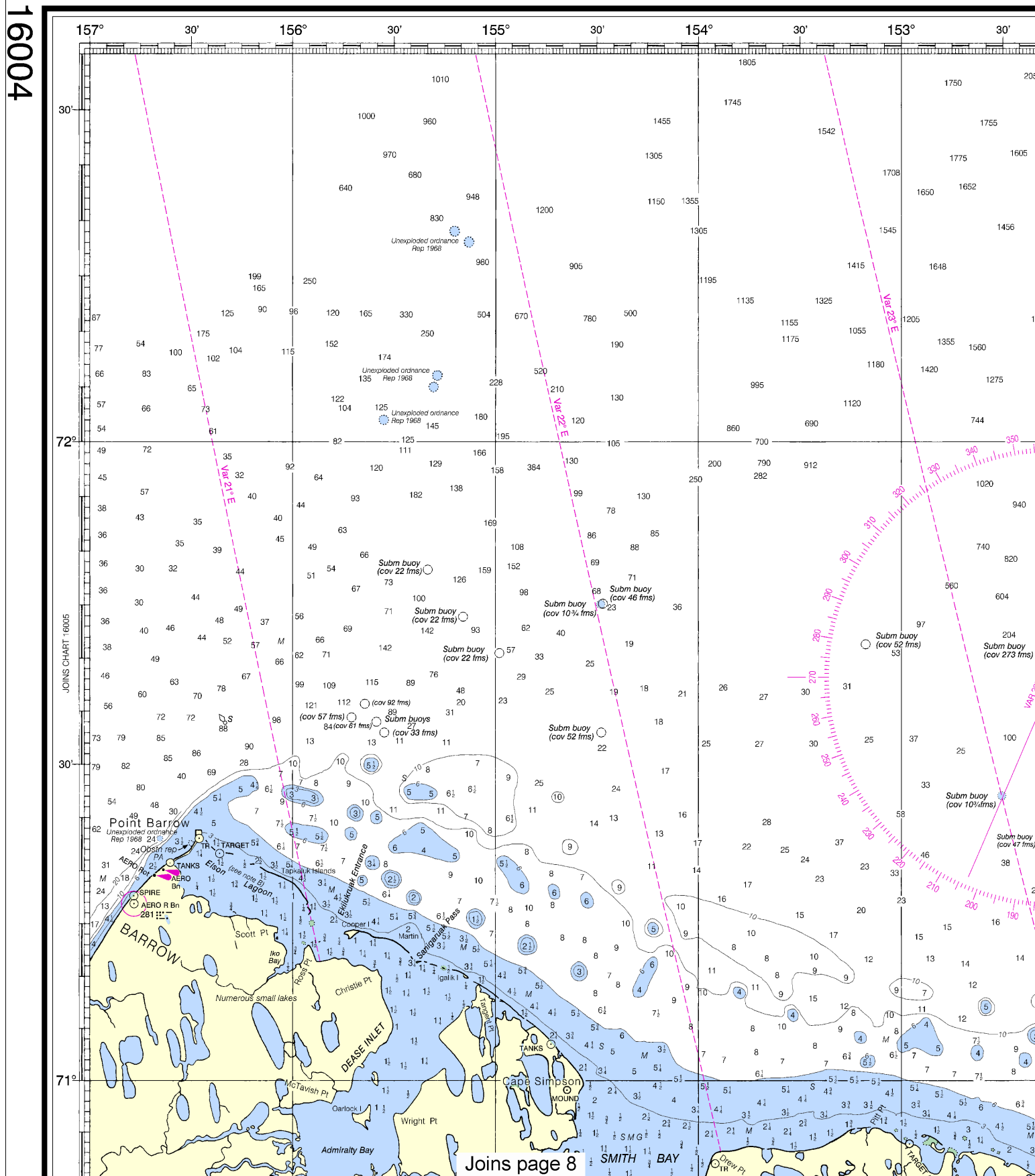
AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rct rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	Oc occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
DIA diaphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

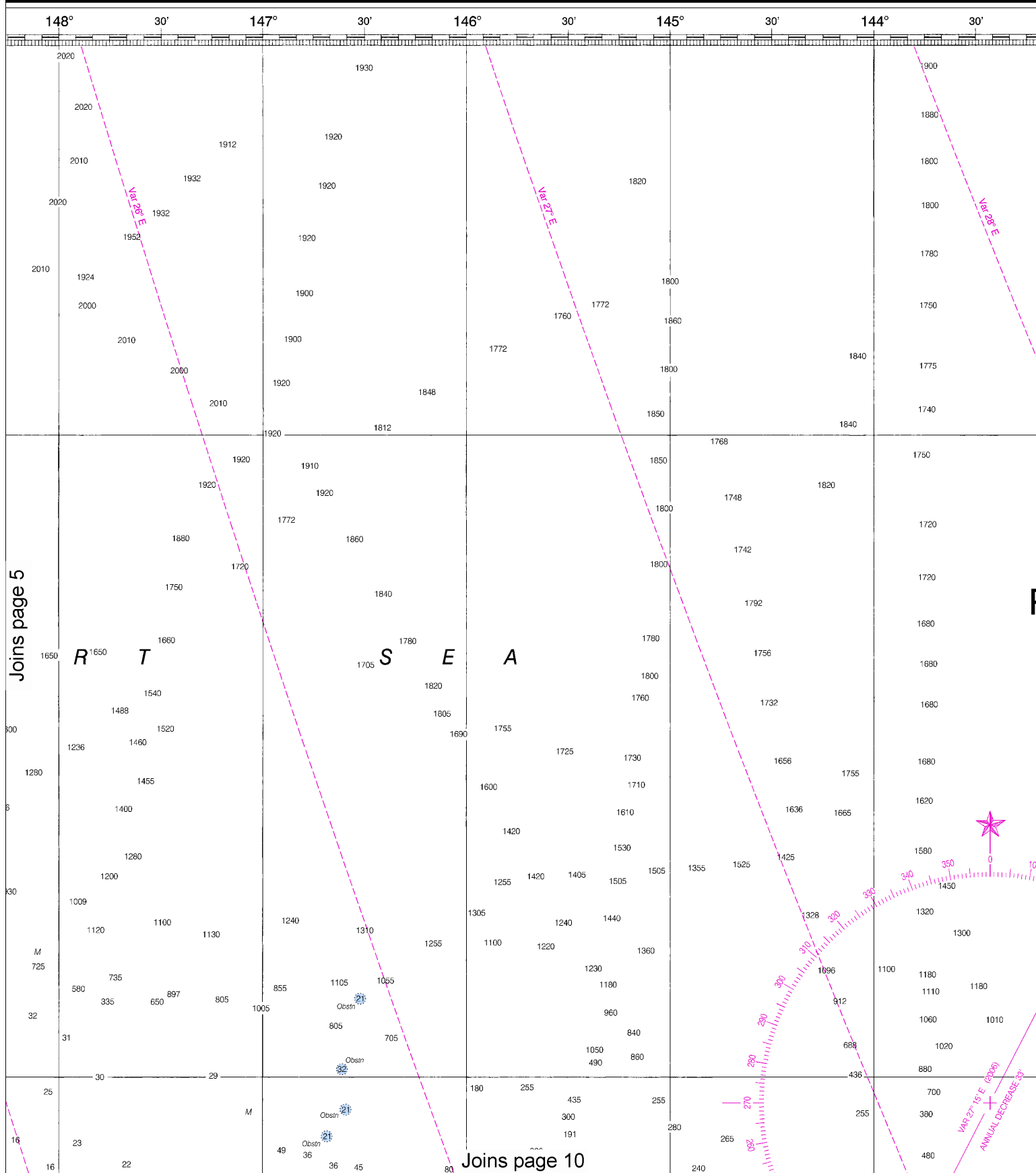
Bds boulders	Co coral	g/ gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
21 Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
22 Rocks that cover and uncover, with heights in feet above datum of soundings.			



5



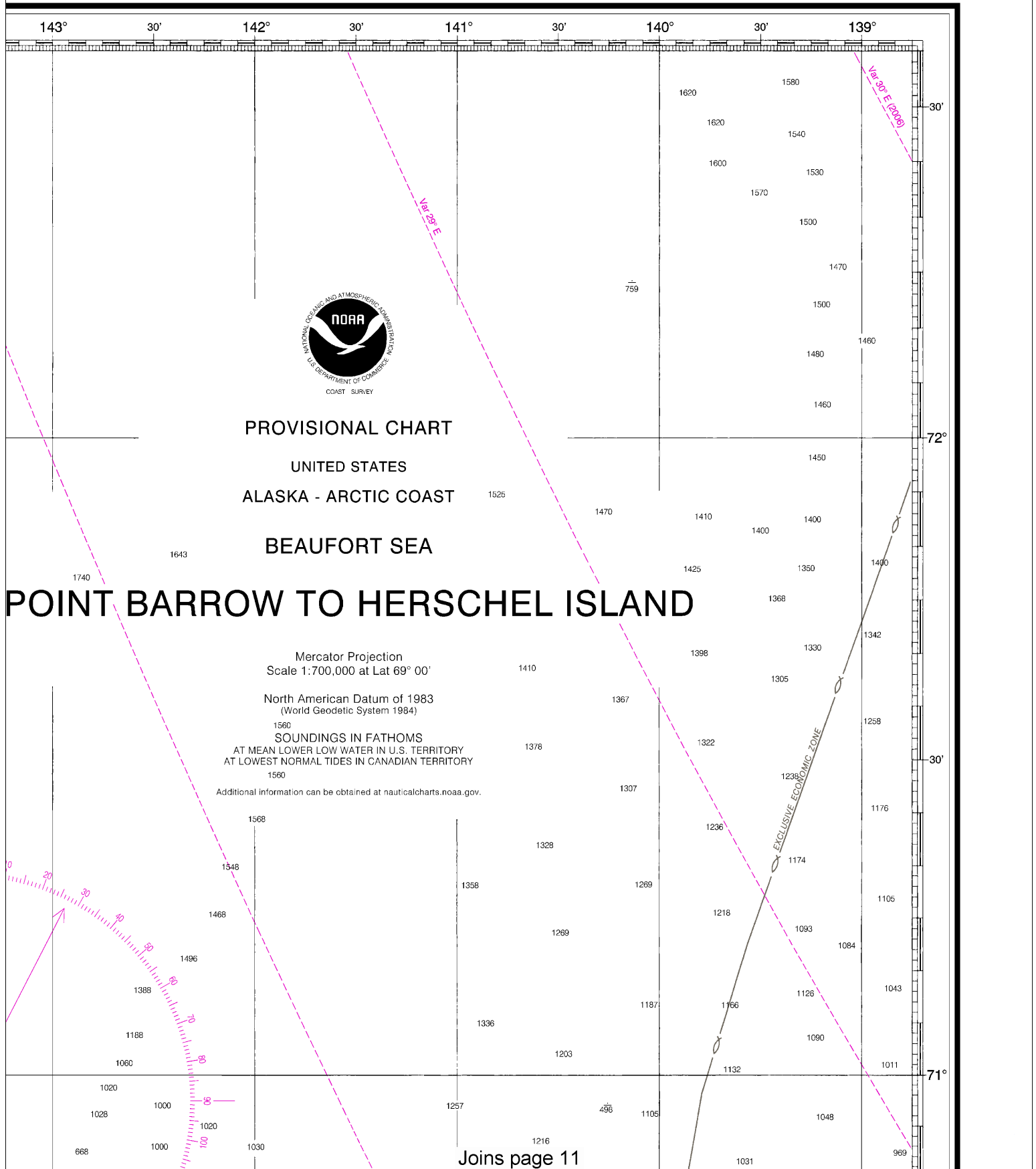
Joins page 5

Joins page 10

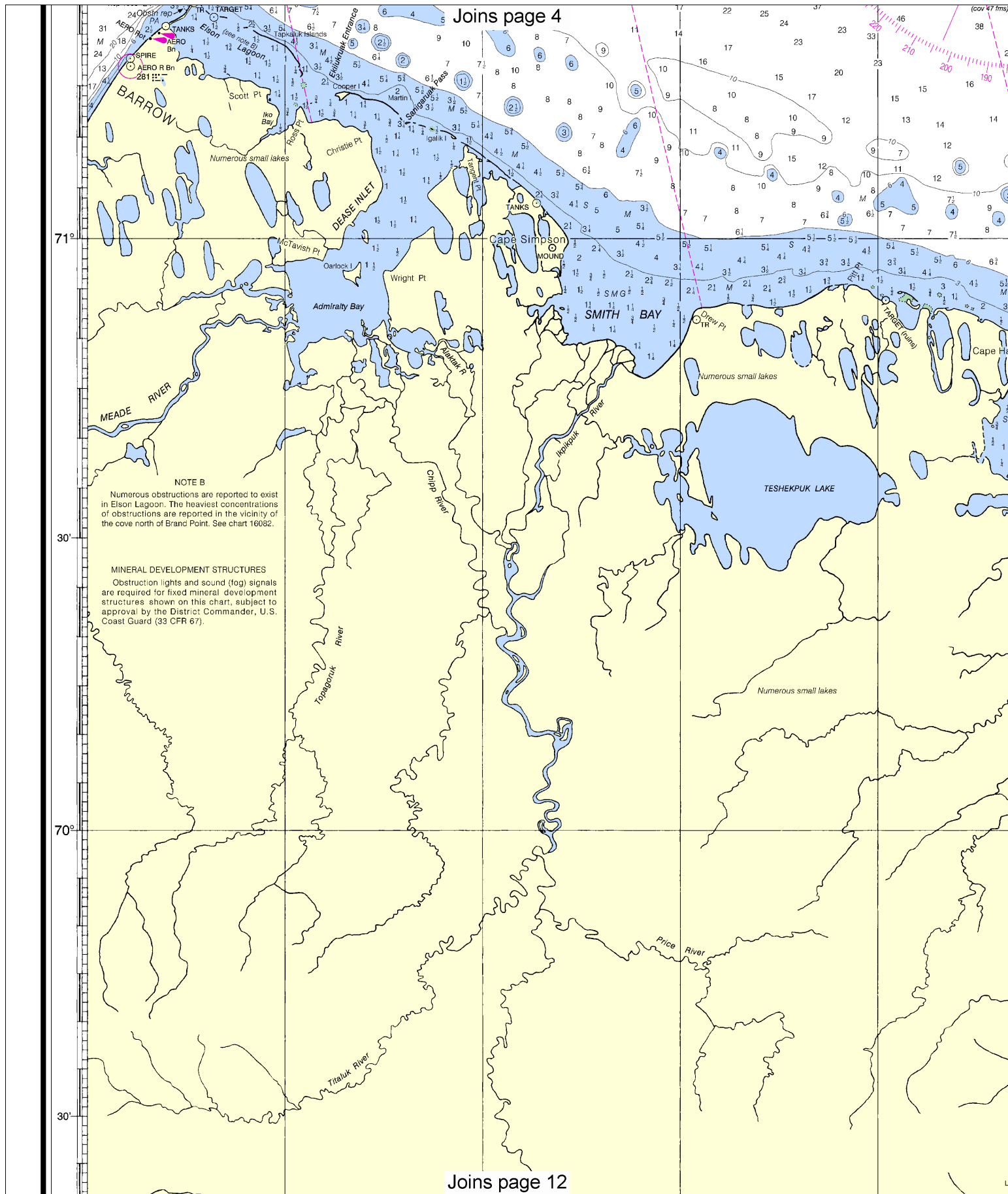
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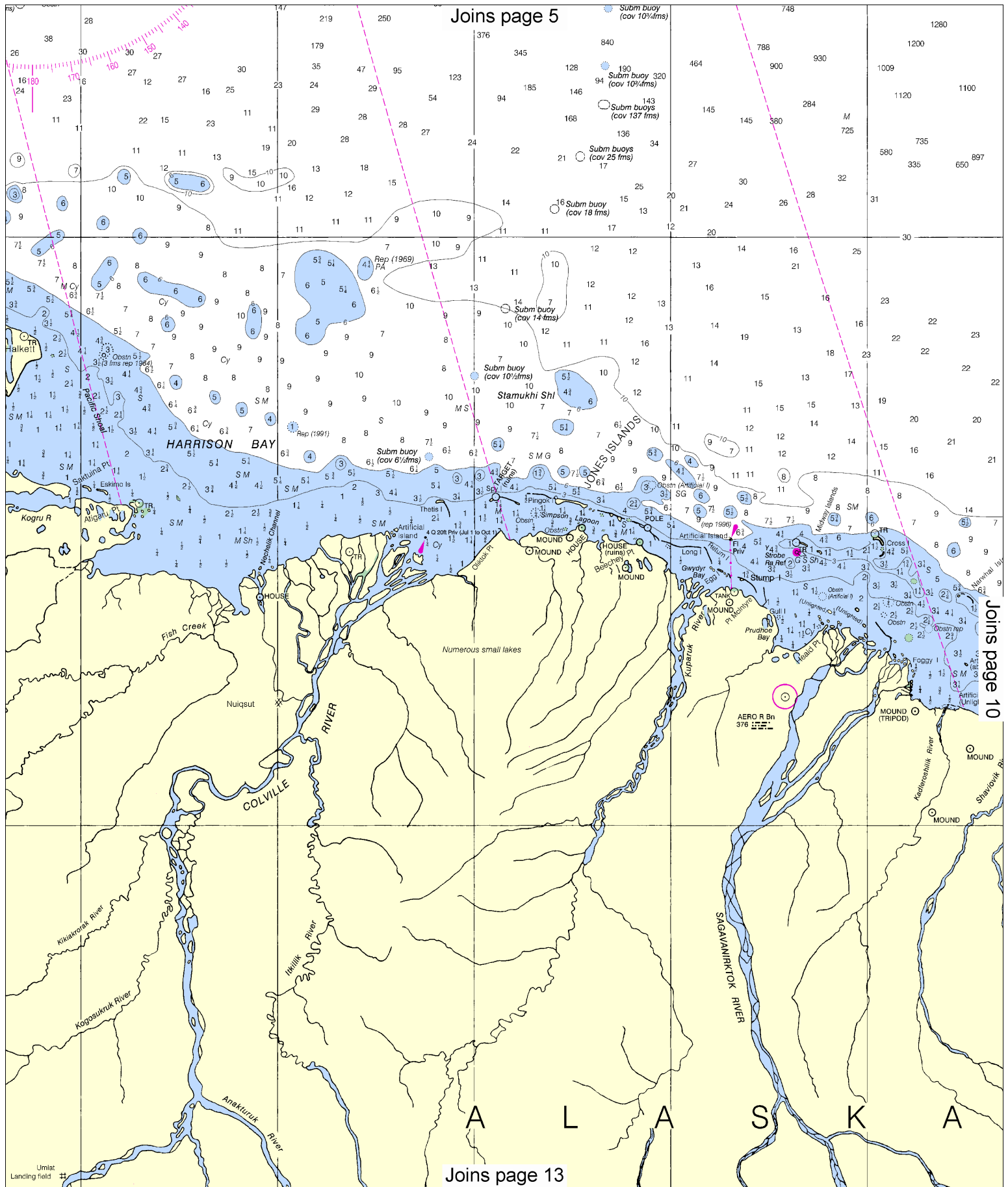
Note: Chart grid lines are aligned with true north.

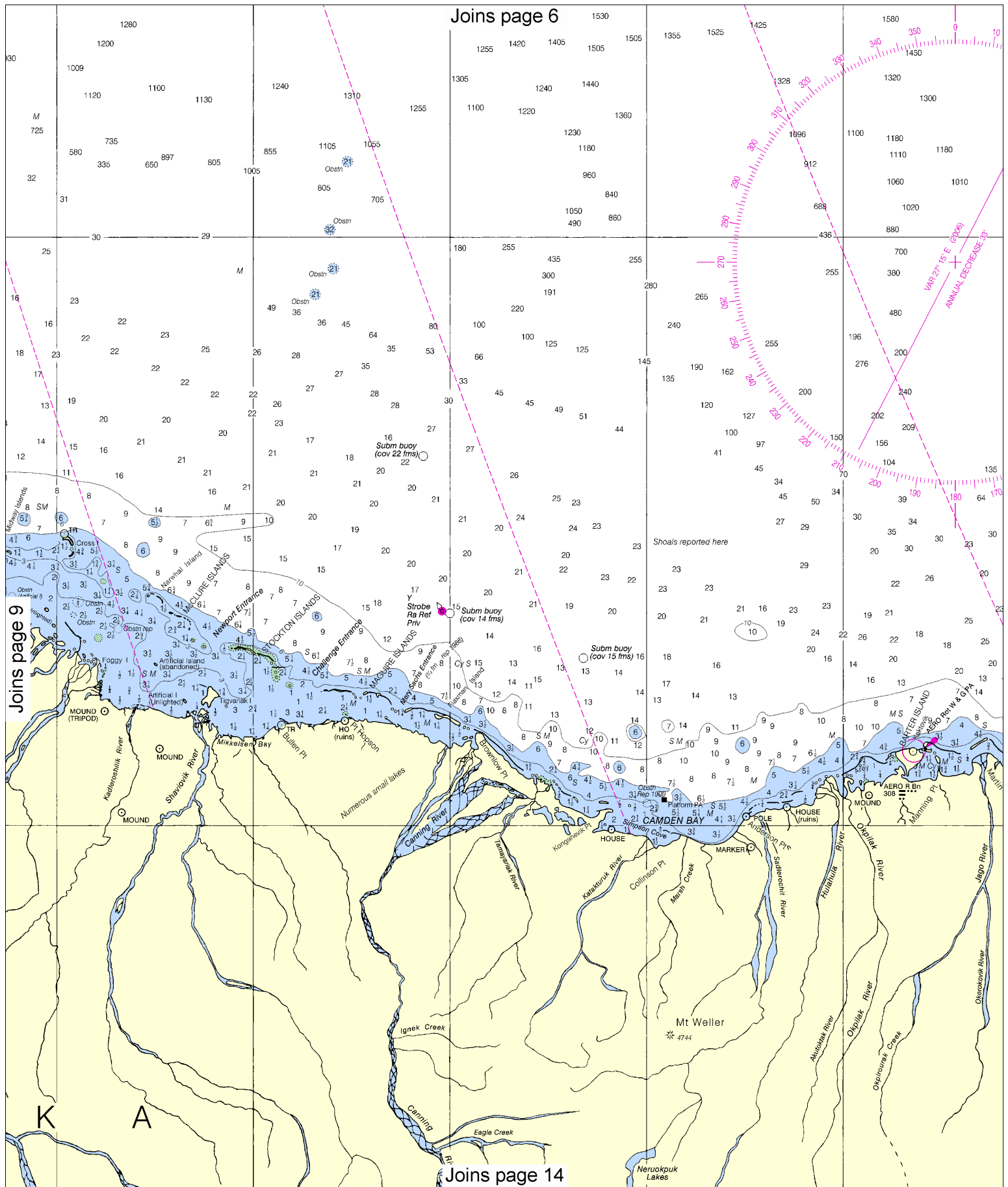
SOUNDINGS IN FATHOMS



This BookletChart has been updated through: Coast Guard Local Notice To Mariners: 0313 1/15/2013,
 NGA Weekly Notice to Mariners: 0413 1/26/2013,
 Canadian Coast Guard Notice to Mariners: 1012 10/26/2012.



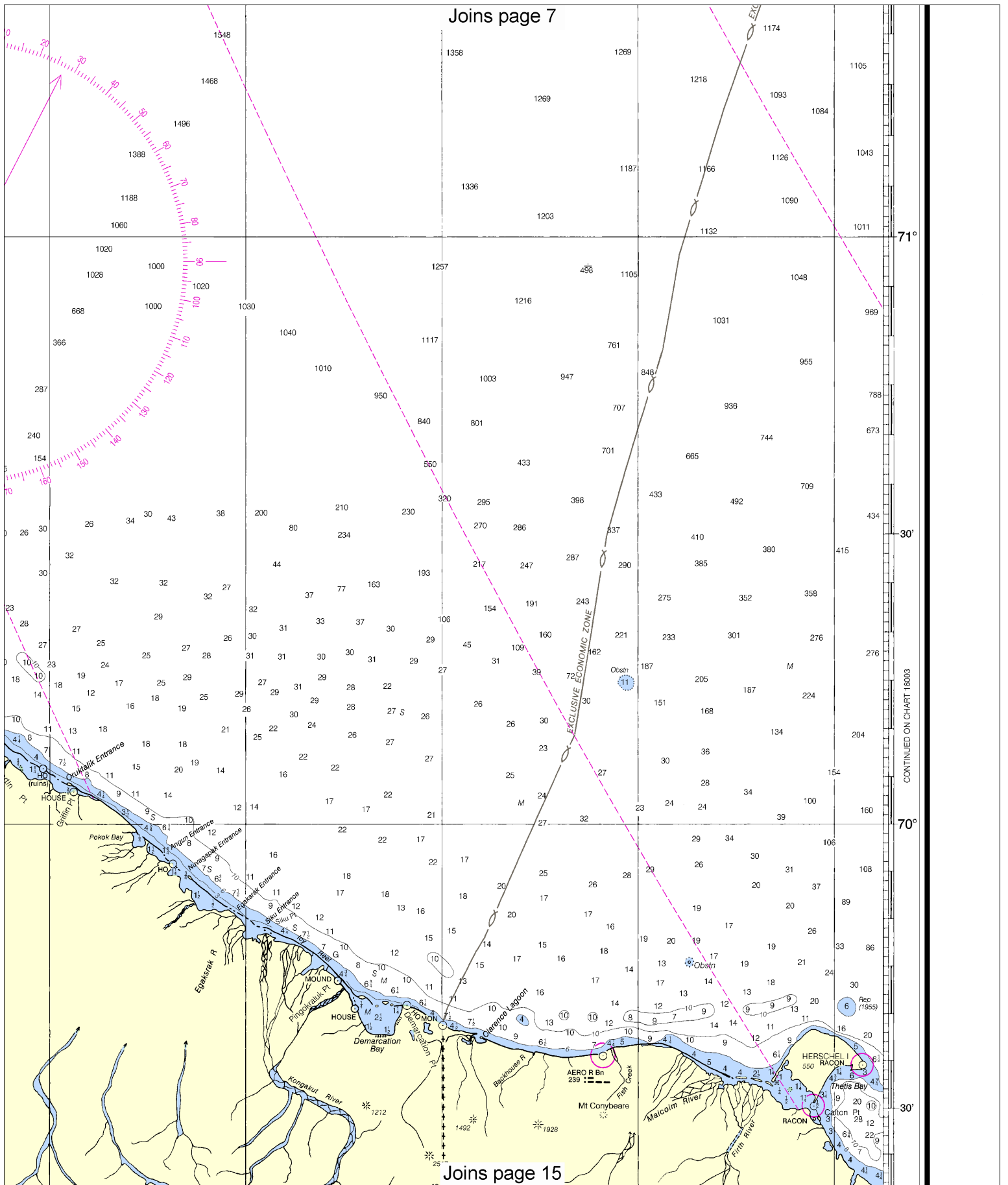




10

Note: Chart grid lines are aligned with true north.

Joins page 7

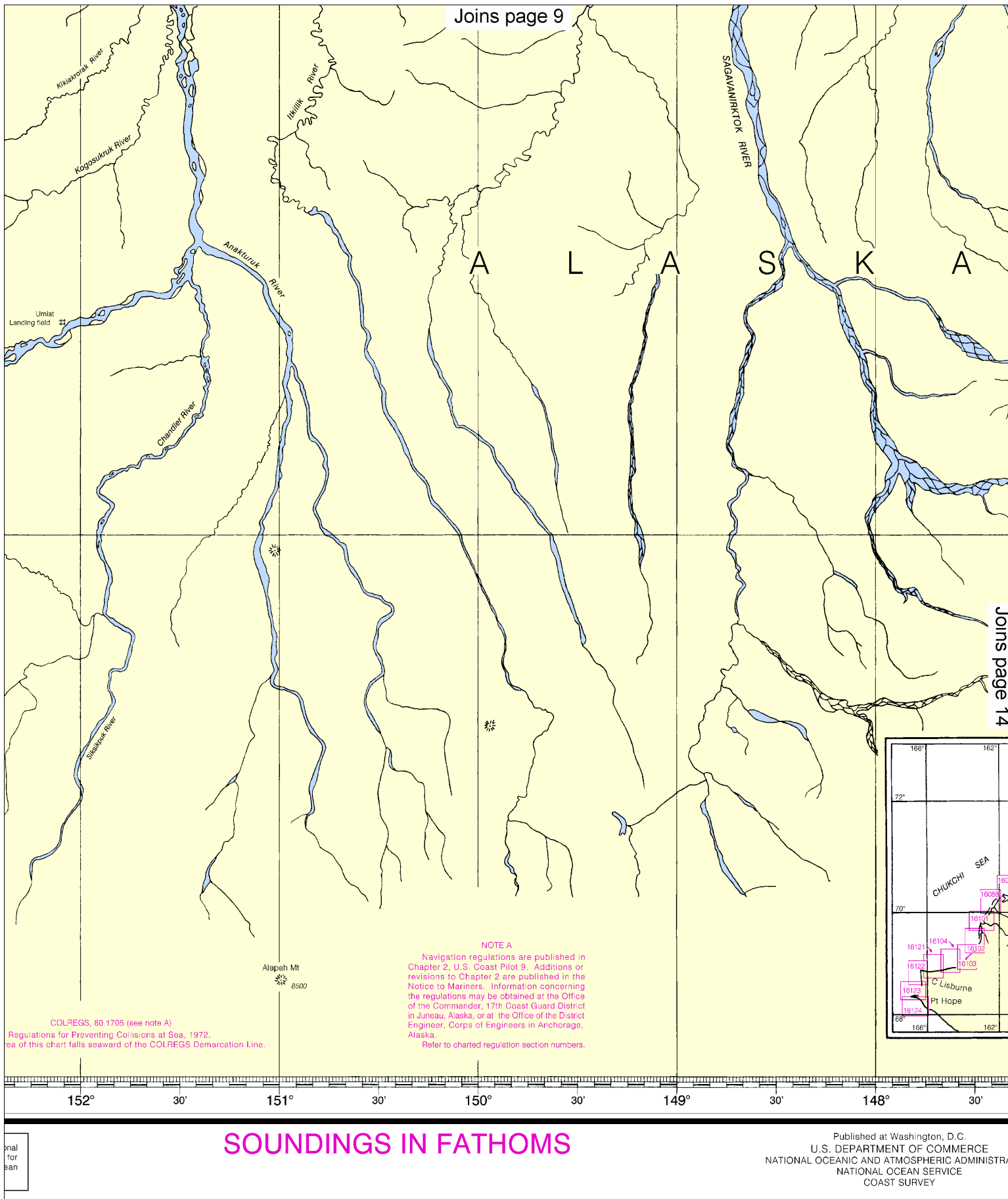


CAUTION

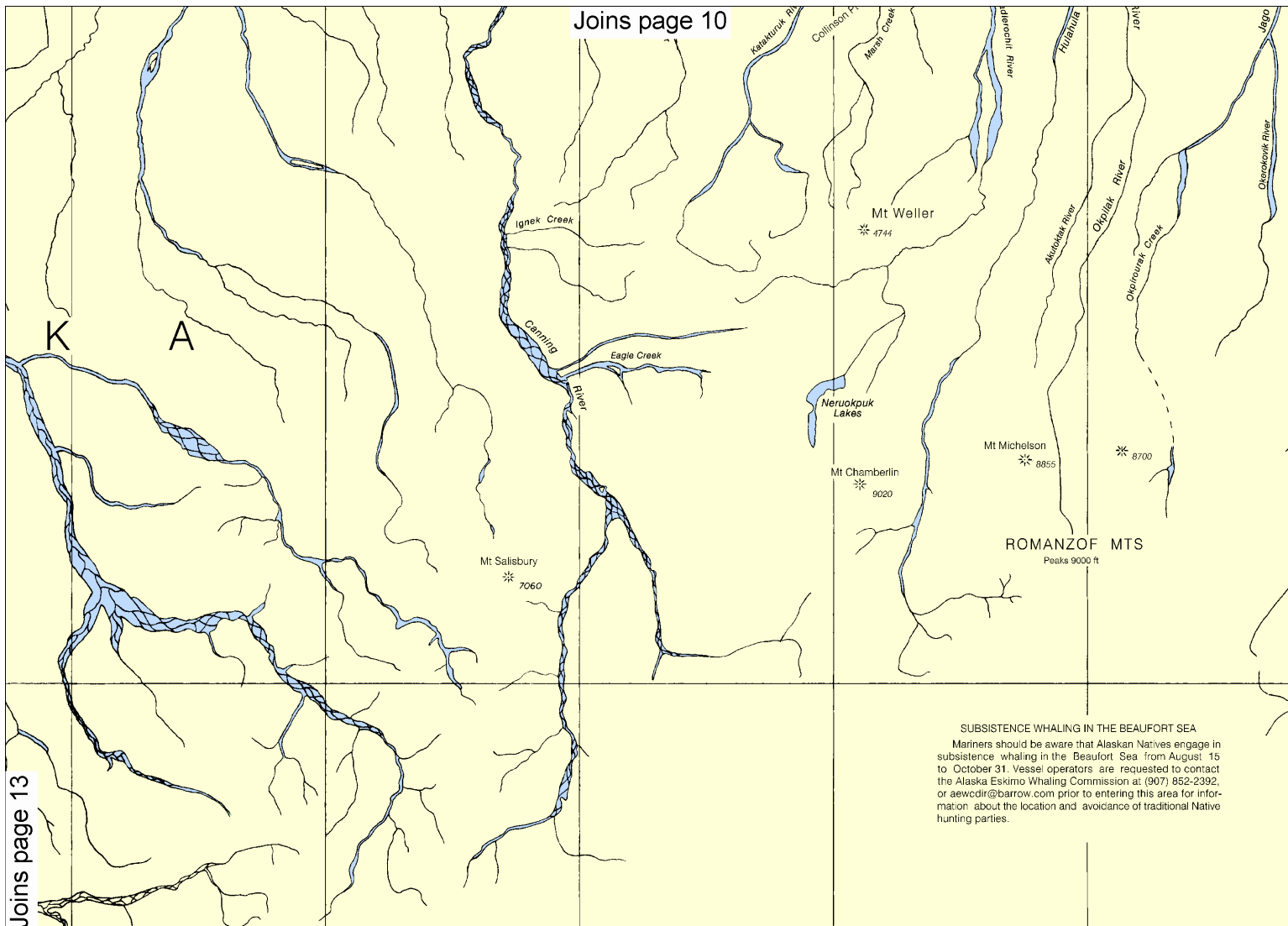
This chart has been corrected from the Notice to Mariners (NM) published weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner.

This nautical chart has been designed to promote safe navigation. The National Ocean Service encourages users to submit corrections, additions, or comments for improving this chart to the Chief, Marine Chart Division (N/CS2), National Ocean Service, NOAA, Silver Spring, Maryland 20910-3282.

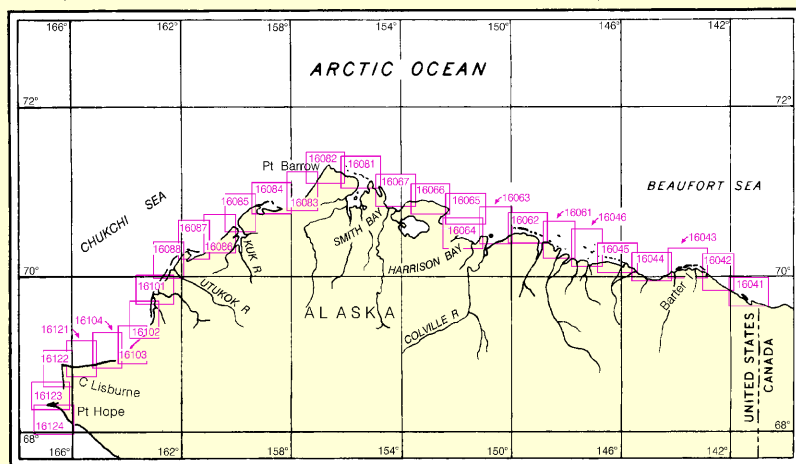
Joins page 9



Joins page 14



SUBSISTENCE WHALING IN THE BEAUFORT SEA
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ABBREVIATIONS (For complete list of Symbols and Abbreviations, see Chart No. 1.)
 Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IO interrupted quick	N nun	Rot rotating
B black	ISO isophase	OBSC obscured	s seconds
Bn beacon	LT LHO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute mile
DIA diaphone	m minutes	O quick	VO very quick
F fixed	MICRO TR microwave tower	R red	W white
Fl flashing	Mkr marker	Ra Ref radar reflector	WHS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:			
Bld boulders	Co coral	gy gray	so soft
bk broken	G gravel	h hard	Rk rock
Cy clay	Gs grass	M mud	S sand
			Sh shells
			sy sticky

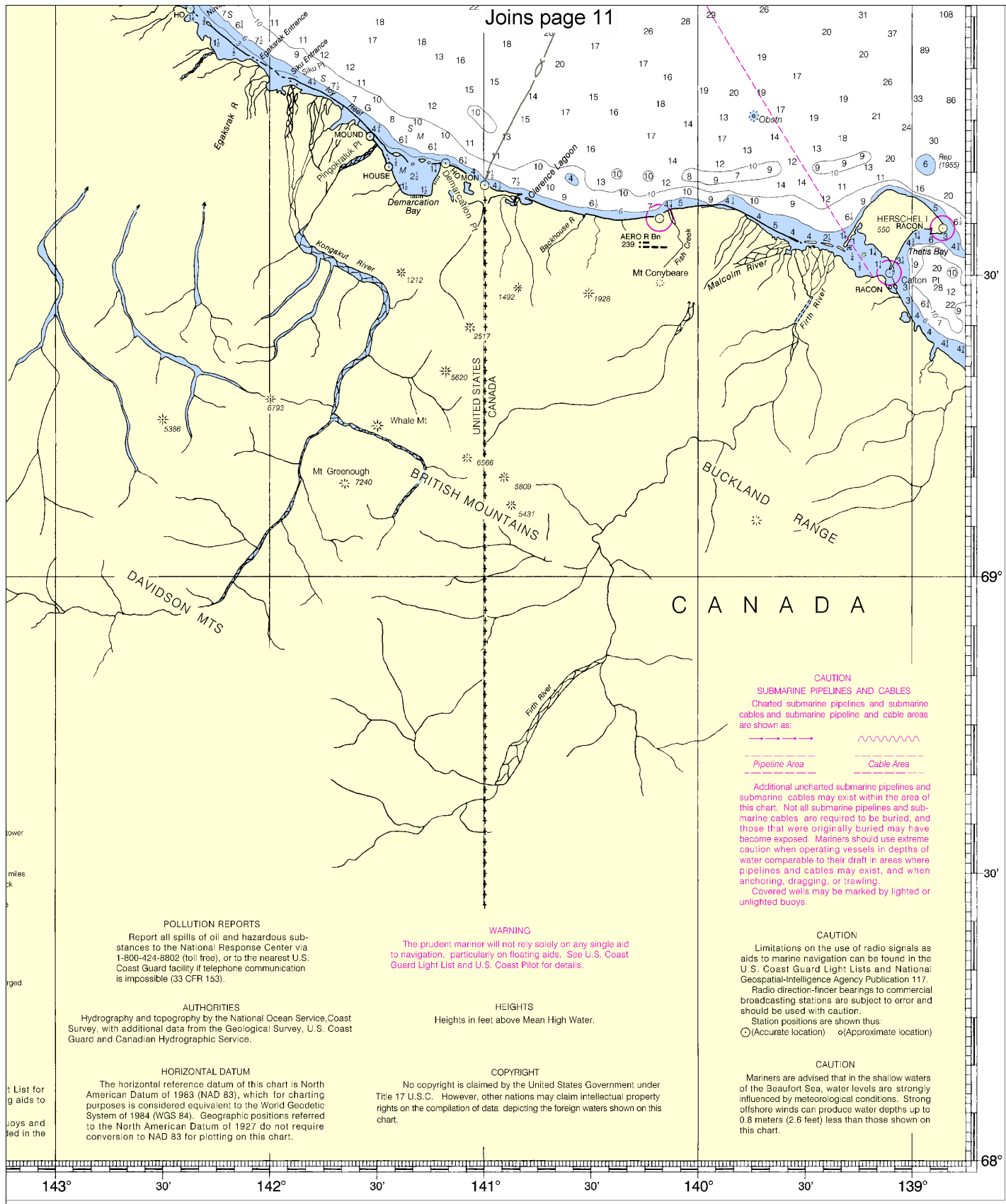
Miscellaneous:			
AUTH authorized	Obstr obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	
(2) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.			
(2) Rocks that cover and uncover, with heights in feet above datum of soundings.			

CAUTION
 Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners.

SUPPLEMENTAL INFORMATION
 Consult U.S. Coast Pilot 9 for important supplemental information.

AIDS TO NAVIGATION
 Consult U.S. Coast Guard Light List for supplemental information concerning navigation.

See Canadian List of Lights, Buoy and Fog Signals for information not included in U.S. Coast Guard Light List.



POLLUTION REPORTS

Report all spills of oil and hazardous substances to the National Response Center via 1-800-424-8802 (toll free), or to the nearest U.S. Coast Guard facility if telephone communication is impossible (33 CFR 153).

AUTHORITIES

Hydrography and topography by the National Ocean Service, Coast Survey, with additional data from the Geological Survey, U.S. Coast Guard and Canadian Hydrographic Service.

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WARNING

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

HEIGHTS

Heights in feet above Mean High Water.

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No copyright is claimed by the United States Government under Title 17 U.S.C. However, other nations may claim intellectual property rights on the compilation of data depicting the foreign waters shown on this chart.

CAUTION
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Charted submarine pipelines and submarine cables and submarine pipeline and cable areas are shown as:

— Pipeline Area — Cable Area

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should use extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist, and when anchoring, dragging, or trawling.

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FATHOMS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
FEET	6	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102
METERS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Pt. Barrow to Herschel Island
SOUNDINGS IN FATHOMS - SCALE 1:700,000

16004



ED. NO. 12



NSN 7642014015007
NGA REFERENCE NO. 16AC016004



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

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Chart and chart related inquiries and comments	—	http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	—	http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	—	http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	—	http://tidesandcurrents.noaa.gov
Marine Forecasts	—	http://www.nws.noaa.gov/om/marine/home.htm
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National Weather Service	—	http://www.weather.gov/
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NOAA's Office of Coast Survey



The Nation's Chartmaker